

**"METHOD AND APPARATUS FOR ANALYZING BIOLOGICAL  
TISSUE IMAGES"**

**ABSTRACT**

The present invention relates to a method and an  
5 apparatus for processing images of biological tissues,  
in particular of human or animal origin. The metric  
quantification of a biological body part or tissue or of  
an abnormal material spot or aggregate contained therein  
is also performed by means of the invention method. The  
10 method according to the invention is applied in  
particular to the Computed Axial Tomography technique.

In particular, the present invention relates to a  
method for processing images acquired by a CAT scan  
technique, comprising a stage of homogeneity map  
15 generation (HOMO-GEN) which comprises the following  
steps:

- 1a) dividing the image into boxes of different size  
iteratively, firstly in four quadrants, then proceeding  
by linear or exponential steps till a predefined size;
- 20 2a) calculating for each quadrant at each division  
scale the relative dispersion (RD) obtained as the  
Standard Deviation divided by the mean value of the  
pixels, in order to associate to each quadrant a set of  
values of RD;
- 25 3a) generating a homogeneity map as a grey scale

image, each point's brightness being given by the mean of the set of values of RD for each quadrant, wherein the image's regions having higher brightness correspond to homogeneous regions.